

Metallic Color Printing Guide

This manual describes the effects that can be expressed when silver ink is used in UJF-7151plus / UJF-7151plusII / UJF-7151plusII e, and how to set and print them.
Please read this manual carefully and use it correctly.

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Notations used in this document

- Items and buttons displayed in menus and on screens are marked with square brackets ([]) as in [File].
- RasterLink6Plus and RasterLink7 are referred to as RasterLink in together.

Screen image used in this document

- The explanation is based on the screen image of RasterLink6Plus as an example.

Symbols



- This symbol indicates important information for using this product.



- This symbol indicates useful information.

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Compatible Operating Environments

Printer	UJF-7151plus firmware version 2.70 or later UJF-7151plusII firmware version 1.3.0 or later UJF-7151plusII e firmware version 5.0 or later
Ink	MUH-100 silver ink
Mimaki Driver	When using RasterLink6Plus: The version that is compatible with the printer you use. When using RasterLink7: version 5.10.2 or later
RIP	RasterLink6Plus version 1.9 or later RasterLink7 version 4.0.0 or later
Other	RasterLinkTools version 1.5 or later

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Before Printing with Silver Ink

Printer Settings

Configure your printer as follows when printing using this guide.

Turn the ionizer (option) setting on

If an ionizer is connected, make sure this setting is turned on.

When left off, the mist may degrade the image quality.

Ionizer settings can be changed in [MACHINE SETUP] - [Ionizer].

Set the logical seek setting to "OFF"

To stabilize the image quality, set the logical seek setting to "OFF".

However, the print time will be longer than when logical seek is set to "ON".

For logical seek setting, go to [SETUP MENU] - [LOGICAL SEEK].

About the Finish

Select either 'Glossy (Mirror Finish)' or 'Matte (Matte Finish)' as the finish.

This manual assumes that 'Glossy (Mirror Finish)' is selected as the finish.

Replace Glossy with Matte when reading through this manual if you want to use 'Matte (Matte Finish)'.

Check the Appropriate Printing Conditions

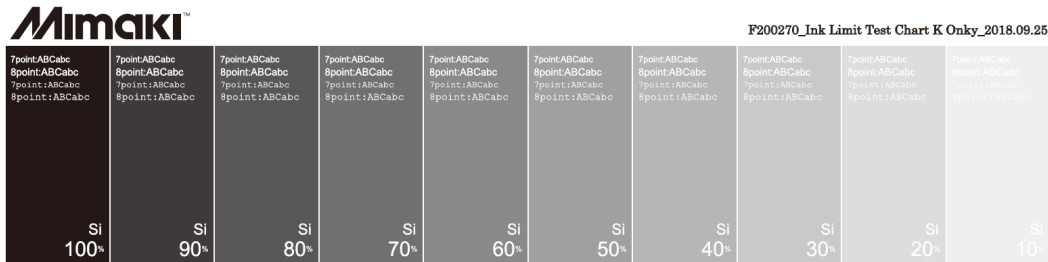
The color of materials printed using MUH-100 silver ink will differ greatly to the color shown in the application preview.

Image quality will vary depending on the media in use. Make sure to check the printing conditions that suit the media in use.

After checking the printing conditions, you should create color samples of silver monochrome and metallic colors using the printing conditions suited to the media in use.

Create a Silver Monochrome Color Sample

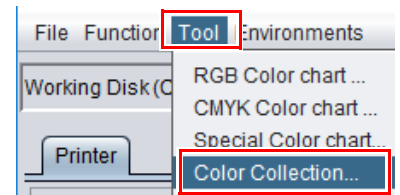
In order to effectively use silver ink on a form of media without a metallic color profile, output the following color sample and check the printing conditions that best matches the media in use.



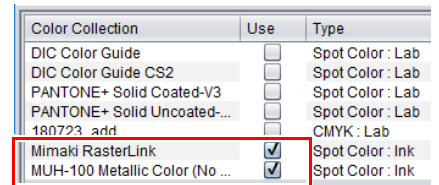
● Create an Initial Color Sample

1. In the [Tool] menu of RasterLink, select [Color Collection].

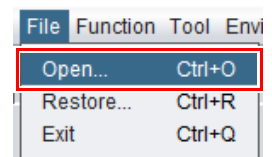
- Confirm the color collection settings.



2. Select the [Use] check boxes next to [MUH-100 Metallic Color (No Silver)] and [MIMAKI RasterLink], and then click [Close].



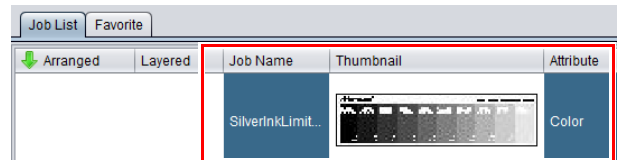
3. In the [File] menu, select [Open].



4. Select the following file, and then click [Open].

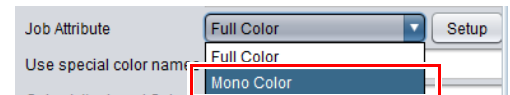
- For RasterLink6Plus
C:\MijSuite\ColorChart\Default\SilverInkLimitTestChart_KOnly.pdf
- For RasterLink7
C:\MijCtrl\ColorChart\Default\SilverInkLimitTestChart_KOnly.pdf

5. In [Job List], select the job you just loaded.



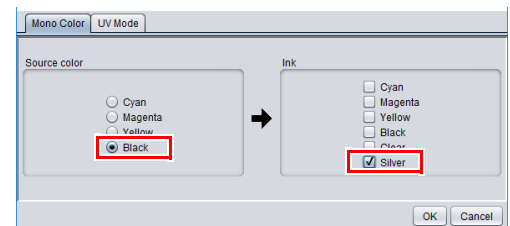
6. Click the [Properties]  icon.

7. For [Job Attribute], select [Mono Color].



8. In the [Mono Color] tab, configure the settings as follows.

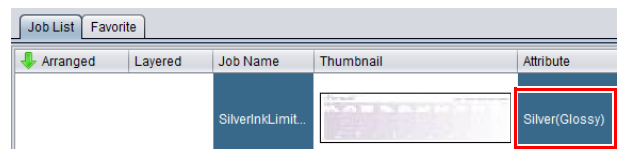
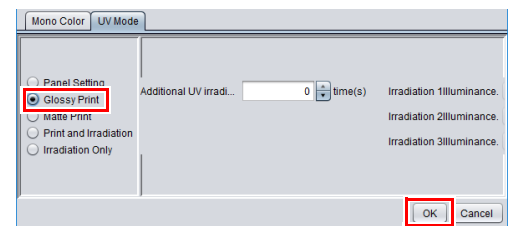
- [Source color]: [Black]
- [Ink]: [Silver]




9. In the [UV Mode] tab, select [Glossy Print], and then click [OK].

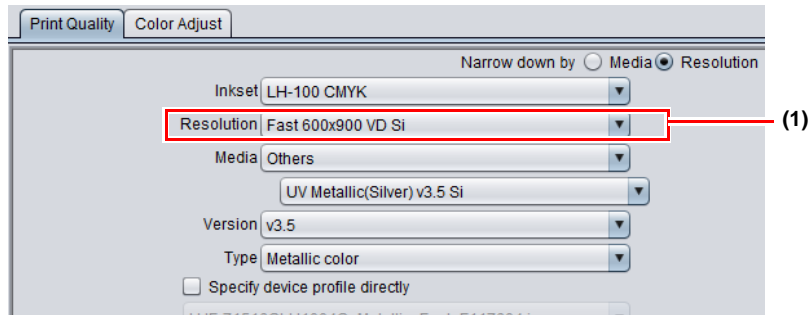
UV mode	Finish
Glossy Print	Mirror finish
Matte Print	Matte finish

- The [Attribute] will show as [Silver (Glossy)].



10. Click the [Quality]  icon.

11. In the [Print Quality] tab, set the printing conditions.



(1) Select the [Resolution].

- Refer to the following table for settings of the printing conditions to use.

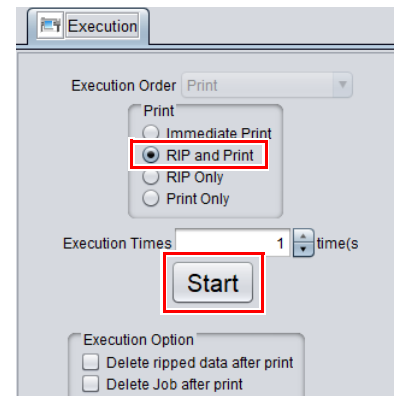
Resolution		Media
Fast 600x900 VD Si	<ul style="list-style-type: none"> • Fast • Recommended for metallic color printing 	A media with "Si" at the end
Fine 600x900 VD Si	<ul style="list-style-type: none"> • Quality • Recommended for silver monochrome printing 	

Important! • "Si" will be added to the end of media names for metallic color profiles.

12. Click the [Execution] icon.

13. In the [Execution] tab, select [RIP and Print], and then click [Start].

- If the color sample seems off, proceed to "Adjusting the Image Quality Based on a Color Sample" (P.7).



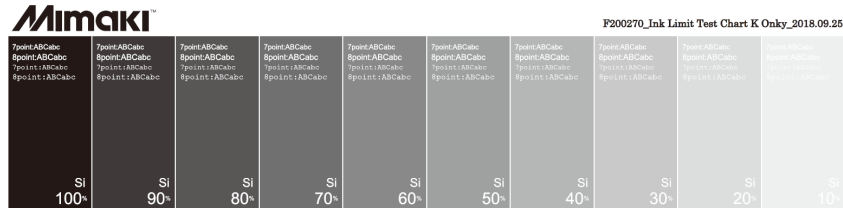
● Adjusting the Image Quality Based on a Color Sample

1. Check the image quality of the silver monochrome color sample printed.



How to check the silver ink image quality

- Silver monochrome color sample patches at 100% ink density that do not bleed or cause banding, and maintain a uniform print surface with a high degree of specularity indicate that the printing conditions are suited to the media in use. Use this as the silver color sample. If the image quality of the 100% density patch is poor, proceed to step 2.

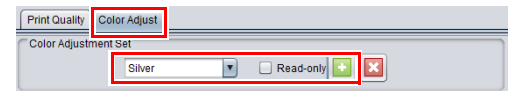



Bleeding: This occurs when there is too much ink, causing excess ink at patch edges and resulting in edges showing up white.

Banding: This occurs when there is insufficient ink, resulting in streaks appearing in the scanning direction.

2. Click the [Quality] icon.

3. Select the [Color Adjust] tab and create a new color adjustment set.



- (1) Enter the name of the new set into the input box.
 - (2) Click .
- This will create a new color adjustment set.

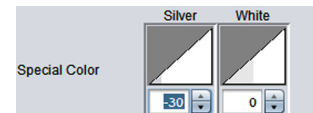
4. Adjust the density of the silver ink.



How to adjust the density of the silver ink

- If bleeding occurred on the 100% density patch created in step 11 in "Create an Initial Color Sample" (P.4), refer to the silver monochrome color sample to look for an ink density at which a good quality print has been achieved. Reduce the silver ink density to match the density of the good quality patch.

ex.) If the image quality at 70% density is good → Configure this setting to -30%



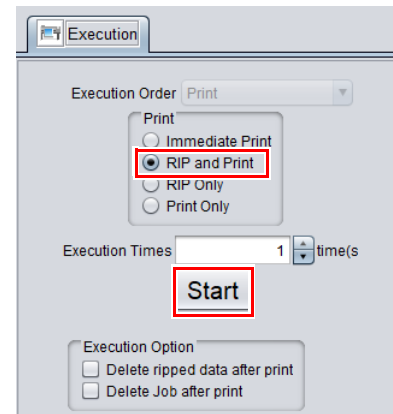
- If banding occurred on the 100% density patch created in step 11 in "Create an Initial Color Sample" (P.4), increase the density of the silver ink.

ex.) Setting: +10% (The silver ink quantity can be changed from -50% to +50%.)

5. Click the [Execution] icon.

6. In the [Execution] tab, select [RIP and Print], and then click [Start].

- If the color sample seems off, return to step 1.

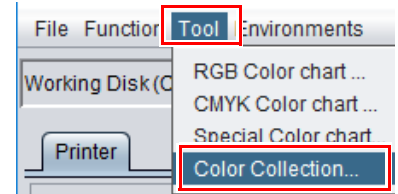


Printing a Metallic Color Sample

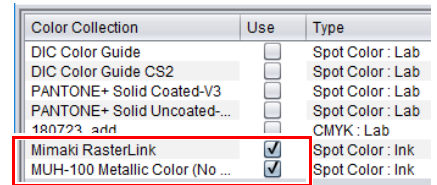
You can print a color sample of a metallic color swatch that can be used in Adobe Illustrator.
You can check printing settings for overlaying color ink on silver ink.

1. In the [Tool] menu of RasterLink, select [Color Collection].

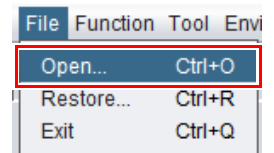
- Confirm the color collection settings.



2. Select the [Use] check boxes next to [MUH-100 Metallic Color (No Silver)] and [MIMAKI RasterLink], and then click [Close].



3. In the [File] menu, select [Open] to load in the metallic color collection PDF.



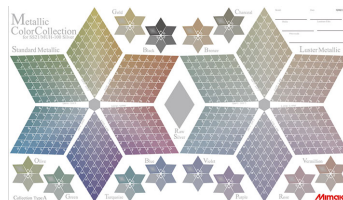
4. Select the following file, and then click [Open].

- For RasterLink6Plus
C:\MijSuite\ColorChart\Default\MetallicColorCollectionA.pdf
- For RasterLink7
C:\MijCtr\ColorChart\Default\MetallicColorCollectionA.pdf



This pattern file covers all colors in the MUH-100 metallic color library.

- Metallic Color Collection A

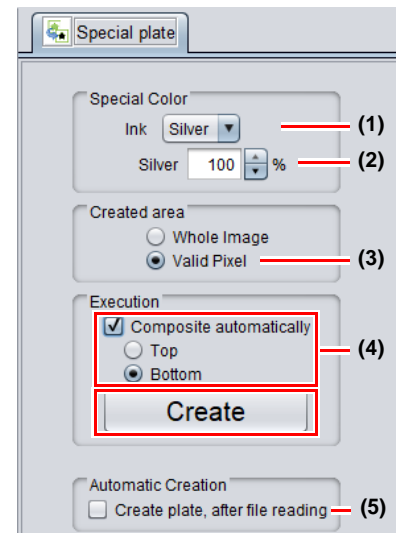


You can check the metallic color finish.

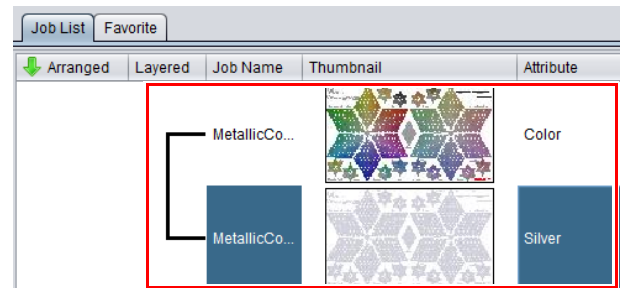
5. Click the [Special plate] icon.

6. In the [Special plate] tab, configure the following settings, and then click [Create].

- (1) [Ink]: Select [Silver].
- (2) [Silver]: Set this to 100%.
- (3) [Created area]: Select [Valid Pixel].
- (4) [Composite automatically]: Select this check box, and select [Bottom].
- (5) [Create plate, after file reading]: Make sure this check box is not selected.



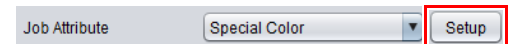
- A composite job to the [Silver] plate will be created.



7. In the [Job List] tab, select the [Silver] job.

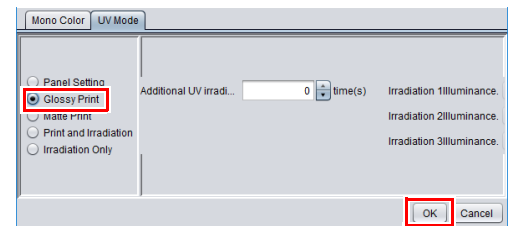
8. Click the [Properties] icon.

9. In the [Job Attribute] field, click [Setup].

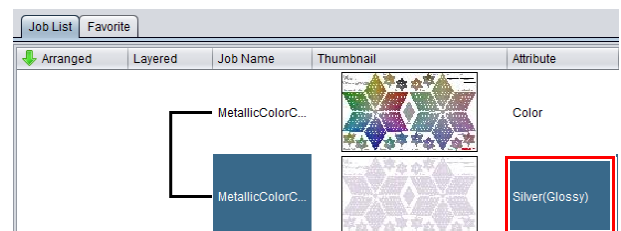


10. In the [UV Mode] tab, select [Glossy Print], and then click [OK].

UV mode	Finish
Glossy Print	Mirror finish
Matte Print	Matte finish




- The [Attribute] will show as [Silver (Glossy)].



11. Click the [Quality] icon.

Important! In the [Job List] tab, check that the [Output Order] is sorted as follows.

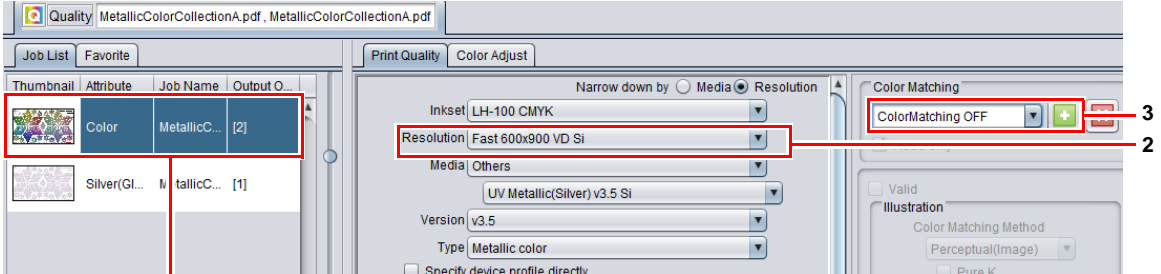
- [Color]: [2]
- [Silver (Glossy)]: [1]



12. In the [Print Quality] tab, set the printing conditions.

Metallic color plate settings

- Configure [Job List] and [Print Quality] settings as follows.

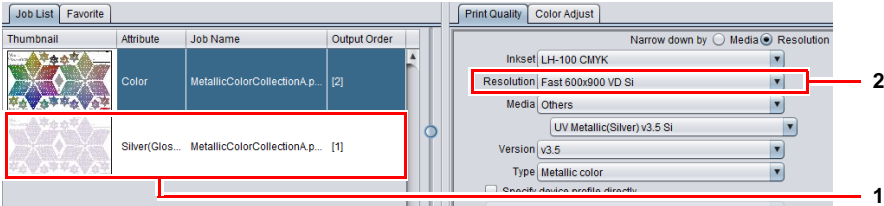


- 1 Select the metallic color plate from [Job List].
- 2 In the [Resolution] field, select [600x900 VD Silver Color].
- 3 In the [Color Matching] field, select [ColorMatching OFF].

Resolution	Color Matching	Media
600x900 VD Silver Color	• ColorMatching OFF	A media with "Si" at the end

Silver plate settings

- Configure [Job List] and [Print Quality] settings as follows.



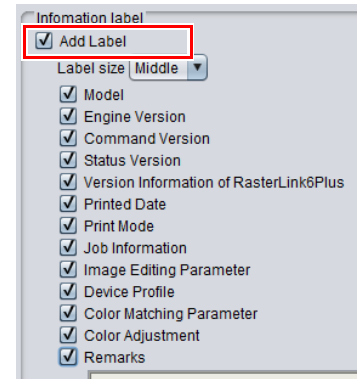
- 1 Select [Silver (Glossy)] from [Job List].
- 2 Select the recommended [Resolution] (see the table below).

Resolution	Media
<ul style="list-style-type: none"> • Fast • Recommended for metallic color printing 	A media with "Si" at the end
<ul style="list-style-type: none"> • Quality • Recommended for silver mono-chrome printing 	



- Add a print information label when printing to check the date and printing conditions set when printing a metallic color collection.

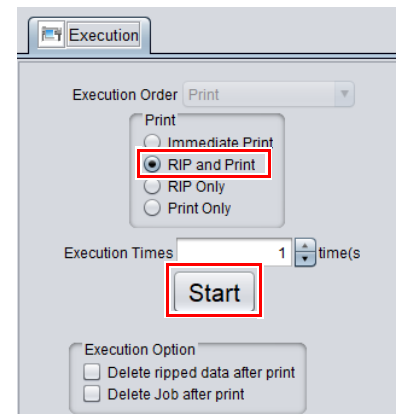
Navigate from the [General Print] function - [Image Edit] tab - [Information Label], and then select the [Add Label] check box to add print information labels when printing.



13. Click the [Execution]  icon.

14. In the [Execution] tab, select [RIP and Print], and then click [Start].

- This ends the process for printing a metallic color sample.



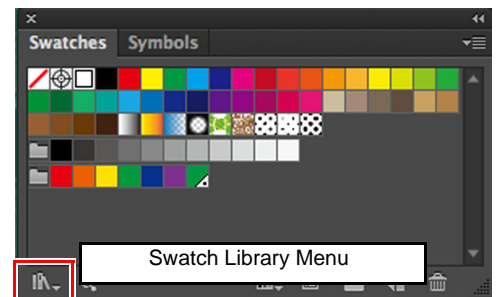
Application Preparations

Open the swatch library in the image editing application.

The swatch printed as the metallic color sample can be used in image editing applications.

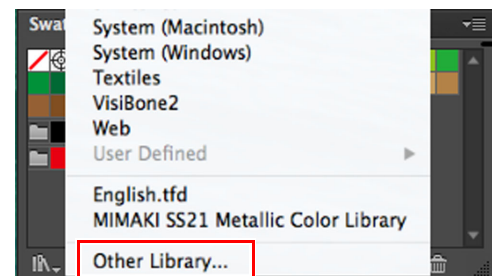
When using Adobe Illustrator

1. In the [Swatches] window, click the [Swatch Library Menu] button.



2. Click [Other Library].

- Open the [Open] dialog box.



3. Select the swatch files in the following folder one at a time, and then click [Open]. Repeat this step for each of the swatch files (two times).

- **Folder location** : For RasterLink6Plus
C:\MijSuite\Swatch\Illustrator

For RasterLink7
C:\MijCtrl\Swatch\Illustrator
- **Swatch files** : MIMAKI Metallic Color Library.ai
MIMAKI RasterLink Library.ai
- This ends swatch library preparations.

Install RasterLinkTools

See the separate “RasterLink Installation Guide” for details on how to install RasterLinkTools.

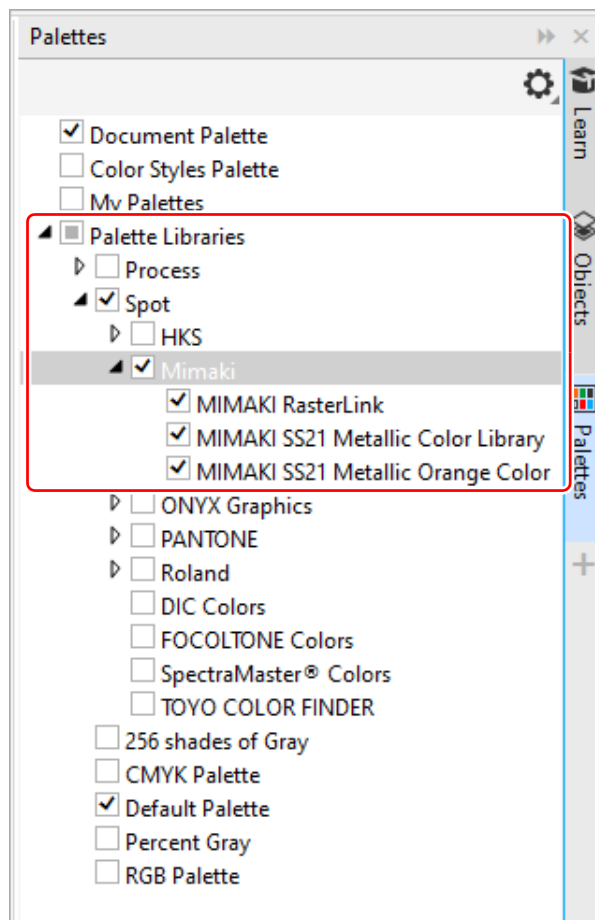
When CoreIDRAW is used

If RasterLinkTools has been installed, select the pallet on CoreIDRAW.

Select Menu [Window] - [Color Palettes] - [Palettes] and check the following items from the Palettes list displayed in the Docker.

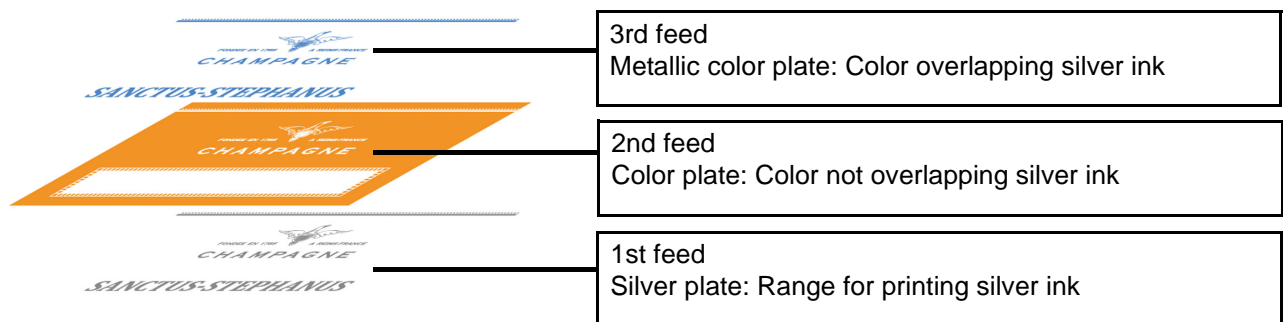
In [Palette Libraries] - [Spot] - [Mimaki]

- MIMAKI RaterLink
- MIMAKI SS21 Metallic Color Library
- MIMAKI SS21 Metallic Orange Color



How to Print in Metallic Color

Print using MUH-100 silver ink in RasterLink using the following three color plates.
Output in silver, color and metallic color as separate feeds.



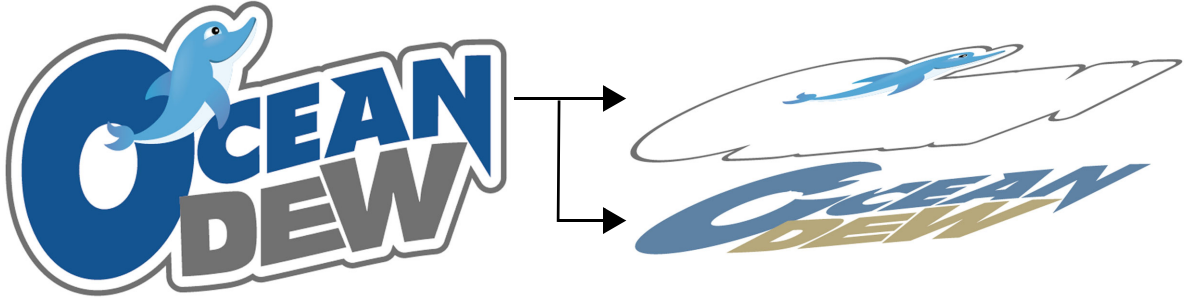
How to Print Using Silver Ink

This section introduces a specific example to describe the procedure used from data creation through to printing.

Printing Part of an Illustration in Metallic Color

In this example we will look at printing the text part of the illustration below in metallic color, describing the procedure used from data creation through to printing.

Here we use a metallic color swatch library to simplify the metallic color printing process.



Important! • Make sure to create image data in CMYK mode.

1. Create a metallic color plate and color plate

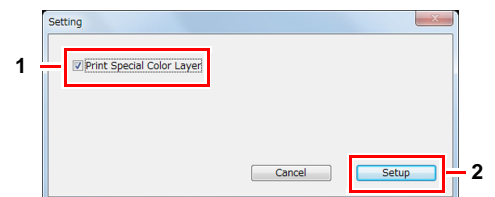
- (1) Select the image text in the application.
- (2) Specify a color of your choice from the MIMAKI Metallic Color Library.



- (3) In RasterLinkTools, click [Setup].

• The Setting screen will appear.

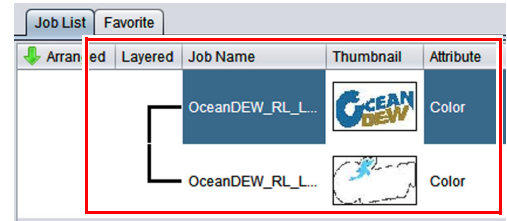
- 1 Select the [Print Special Color Layer] check box.
- 2 Click [Setup].




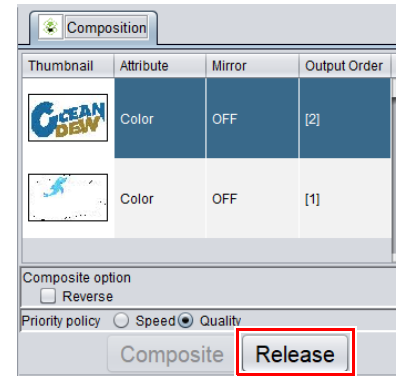
- (4) In RasterLinkTools, click [Output to RasterLink] to save the file to the RasterLink hot folder.



- The color plate and the metallic color plate of the output data will appear in the job list screen in RasterLink.
- At this time the color plate and the metallic color plate will be composited together automatically.




- (5) Click the [Composition]  icon, and then click [Release].
- Without doing this you will not be able to create plates.



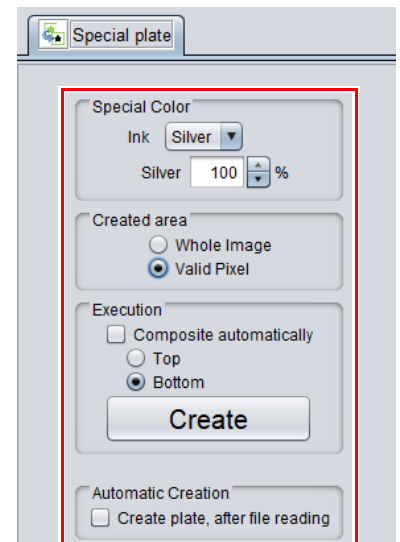
- RasterLink can also open data directly output from the image editing application without using the [Output to RL6] option.

2. Create a silver plate.

- (1) In [Job List], select metallic color plate, and then click the [Special plate]  icon.

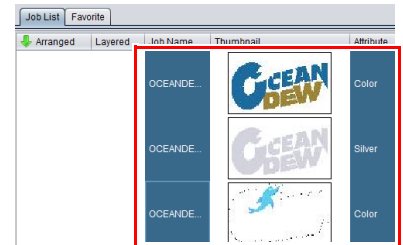
- (2) In the [Special plate] tab, configure the following settings, and then click [Create].

- [Ink]: [Silver]
- [Silver]: 100%
- [Created area]: [Valid Pixel]
- [Execution]: Deselect the [Composite automatically] check box, and select [Bottom].
- [Create plate, after file reading]: Deselect



3. Merge the jobs to create a composite image.

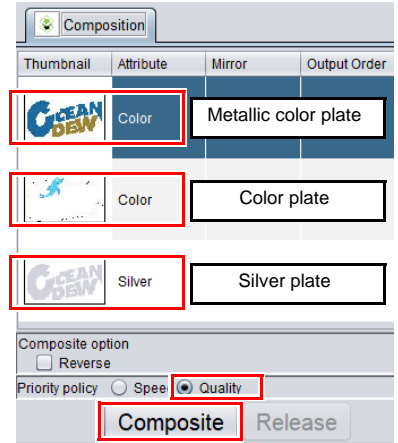
- (1) In [Job List], select three jobs as the metallic color plate, color plate and silver plate.



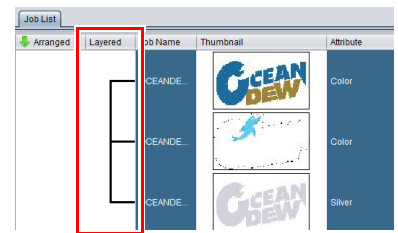
- (2) Click the [Composition]  icon.

- (3) In the [Composition] tab, check that the following conditions are set, and then click [Composite].

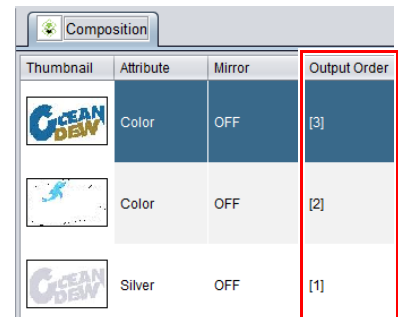
- Check that the job order is arranged so that print jobs are sorted from silver plate → color plate → metallic color plate from the bottom.
- Under [Composite option], select [Quality] as the priority policy.



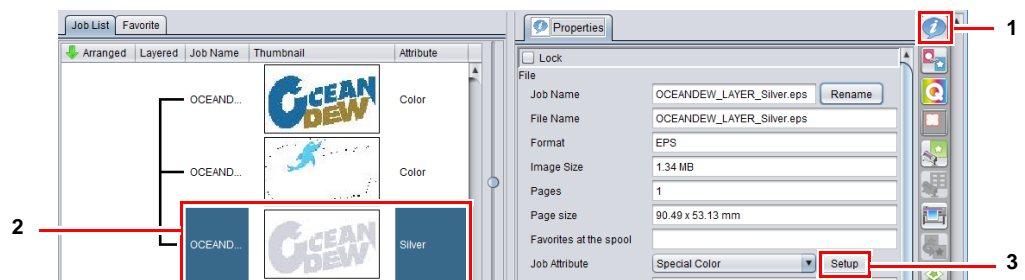
- In the [Layered] column of the [Job List] tab, a line connecting the three layers will appear.



- The job output order should show [1] [2] [3] from the bottom.



4. Specify the finish for the silver plate.



- (1) Click the [Properties]  icon.

- (2) In [Job List], select the [Silver] job.

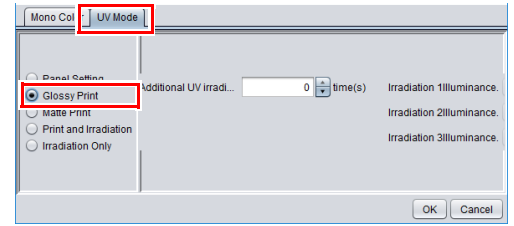
(3) In the [Job Attribute] field in the [Properties] tab, click [Setup].

- The [Job Attribute] dialog box will appear.

(4) Click the [UV Mode] tab, and then select [Glossy Print and Irradiation].

- Refer to the following table when making a selection.

UV mode	Finish
Glossy Print	Mirror finish
Matte Print	Matte finish



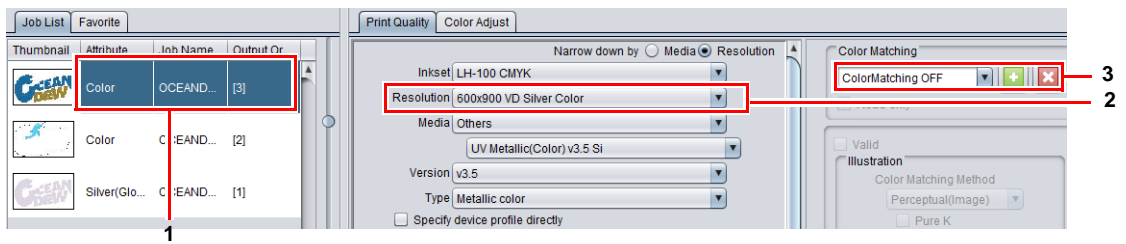
• Be sure to select [Glossy Print] or [Matte Print] for Silver version UV mode.

5. Print out the job created.

(1) Click the [Quality] icon.

Metallic color plate settings

- Configure [Job List] and [Print Quality] settings as follows.

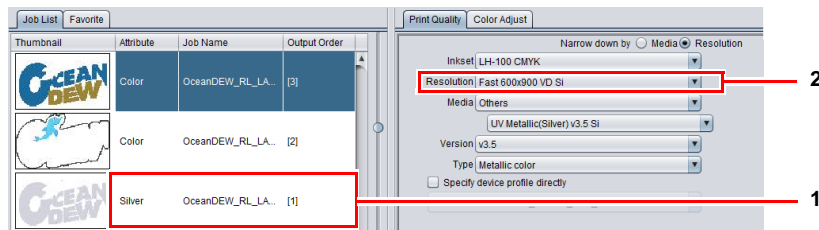


- 1 Select the metallic color plate from [Job List].
- 2 In the [Resolution] field, select [600x900 VD Silver Color].
- 3 In the [Color Matching] field, select [ColorMatching OFF].

Resolution	Color Matching	Media
600x900 VD Silver Color	• ColorMatching OFF	A media with "Si" at the end

Silver plate settings

- Configure [Job List] and [Print Quality] settings as follows.



- 1 Select [Silver (Glossy)] from [Job List].
- 2 Select the recommended [Resolution] (see the table below).

Resolution	Media
Fast 600x900 VD Si	A media with "Si" at the end
Fine 600x900 VD Si	

Color plate settings

- From the [Job List], select [Color], and then set the normal color output settings in [Print Quality].

(2) Click the [Execution]  icon.

(3) Click [Start].

Troubleshooting

Printed Silver and Metallic Colors Lack a Glossy Appearance

Check the following settings.

Settings	Description
Check the printing conditions of the silver plate and the metallic color plate.	<ul style="list-style-type: none">• Profile Verify whether a metallic color profile ending with "Si" has been applied.• Density control If adjustments have been made to the density of the silver ink, check to see whether a color adjustment set has been applied.• Color matching Set color matching to "ColorMatching OFF".
Check the ionizer settings.	<ul style="list-style-type: none">• If image quality is lacking, check to see if the ionizer is turned "ON".
Check the logical seek setting.	<ul style="list-style-type: none">• If the image quality is not stable, check that the logical seek is "OFF".

Printing with Silver Ink and White/Clear Ink

Silver ink cannot be printed with other ink types (color, white, clear ink) on the same feed.
Create a job with the following conditions to merge and print silver ink with white or clear ink.

Purpose	Job Attribute	Composite Option
Printing with white ink	White	Quality
Printing with clear ink	Clear	Quality

